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ABSTRACT

The document is the first of a two-part set. It is directed primarily to the typewriting teacher and provides an introduction to the course designed to assist the secondary school teacher and student in achieving a high level of performance. It briefly describes the nine modules of instruction which are presented in detail in the second volume of the set. General aims and objectives for learning, which focus on the overall competencies students should acquire from the study of typewriting, are outlined. The organization of the instructional modules is based on principles related to the following aspects of each module: performance objectives, skill development, content, suggested activities, interim checkups, and competency. Principles for learning typewriting, based on what the student needs to know and understand and what the student needs to do, are provided, with a student typewriter technique check list. Guiding principles for teachers are also provided and include a teacher self-evaluation scale. Principles and suggestions for the evaluation and grading of students are presented. Suggestions for the arrangement and equipment needed for the typewriting instructional laboratory are offered. Common letter styles and samples of proficiency certificates are provided. A bibliography is included. (Author/EC)

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TYPEWRITING SYLLABUS

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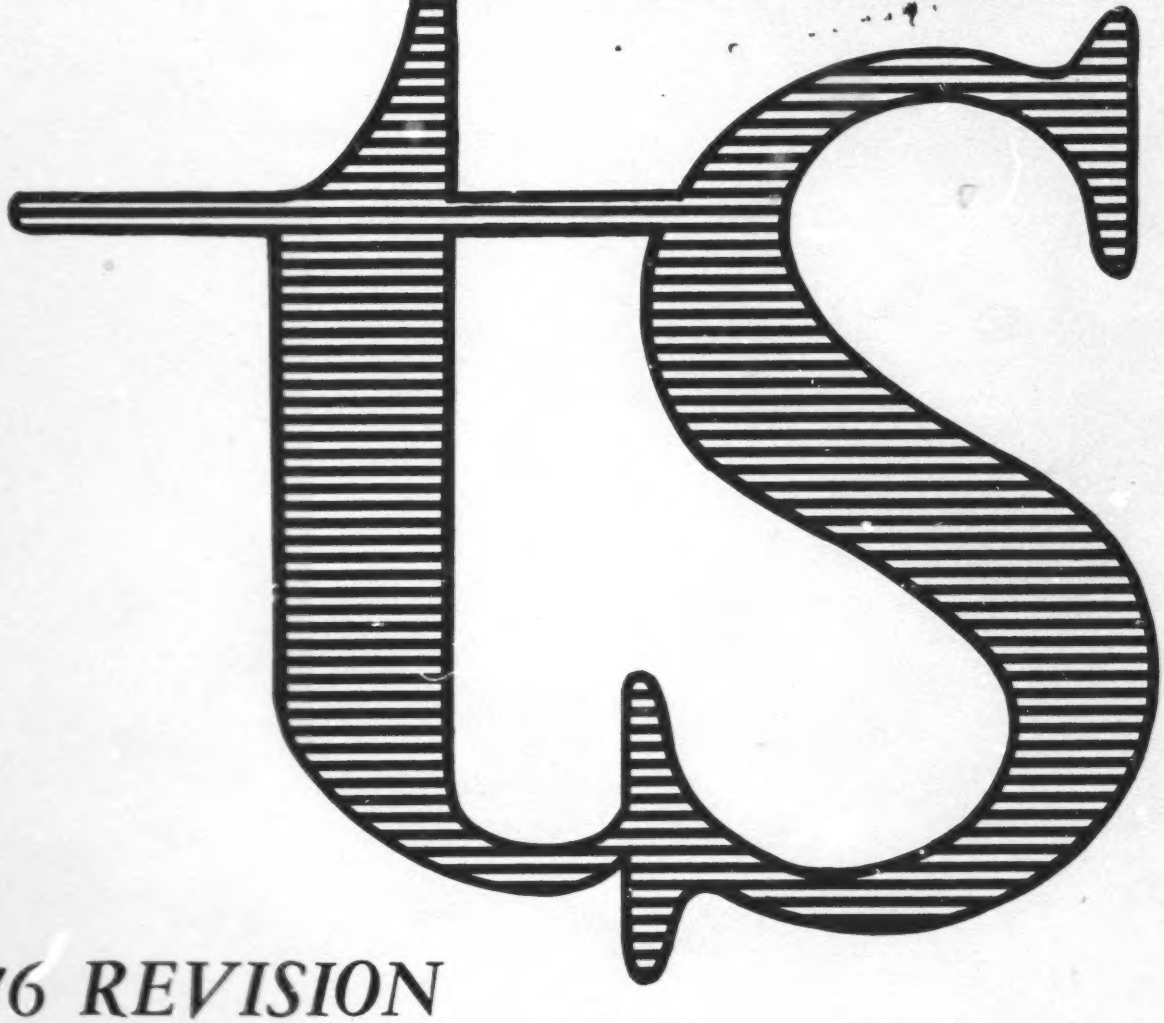

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1976 REVISION

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Bureau of Occupational and Career Curriculum
Albany, New York 12234

TYPEWRITING SYLLABUS

1976 Revision

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FOREWORD

This *Typewriting Syllabus* replaces the *Syllabus for Introductory Typewriting, Typewriting I, and Personal Typewriting*. This major revision includes the latest curricular concepts and has been expanded to include nine modules. The student now has the option to progress from basic keyboarding, to personal use, to employment proficiency, and to advanced secretarial skills.

The State Advisory Committee, which met in 1974, consisted of:

- Dr. Philip Atkinson, Chairman, Business Education Department, Hunter College, New York City
- Mr. V. Frank Blasio, Curriculum Coordinator, Nassau County BOCES
- Mr. Donald Donin, Coordinator of Typewriting, Board of Education, New York City
- Mrs. Mary E. Dougherty, Director of Business Education, Board of Education, Buffalo
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- Mrs. Sandra P. Kelly, Business Teacher, Ogdensburg Free Academy
- Mr. Roy LaGrow, Coordinator, Integrated Business Program, Board of Education, Syracuse
- Miss Doris R. Near, Chairman, Business Education Department, West Islip Senior High School
- Mr. Herbert F. Yengel, Chairman, Business Education Department, Farmingdale Senior High School

The Education Department was represented by Hobart H. Conover, Chief, Bureau of Business Education, Robert Fleig, Associate in Business Education and Alvin E. Rubin, Associate in Vocational Curriculum of this Bureau.

The State Advisory Committee established the priorities, the general objectives, the new format, and the content for the nine modules. This new syllabus provides typewriting instruction for two years, including advanced modules for use in the Office Practice or Secretarial Practice courses. This Syllabus is divided into 2 sections: Part I. Introduction and Part II. Modules.

This syllabus was developed through a grant to Nassau County BOCES where Mr. Blasio coordinated the writing prepared by Dr. Atkinson, Ms. Near, and Mr. Yengel, who were members of the above Advisory Committee.

Hobart Conover and Robert Fleig provided the technical assistance and review of the materials. Alvin Rubin coordinated the entire project and prepared the manuscript for publication.

G. Earl Hay, *Chief*
Bureau of Occupational and Career Curriculum

Gordon E. Van Hooft, *Director*
Division of Curriculum Development

MESSAGE TO TEACHERS

The opportunity to learn typewriting has universal appeal. People of all ages, usually with justification, feel that they can learn to operate a typewriter with some degree of skill. Experience has shown that with a modern, well-maintained typewriter, a scientifically designed textbook, a teacher who uses proven teaching methods and who is patiently persistent, and with adequate practice, the student usually will become as competent typist as he or she desires to be.

The beginner usually shows an eagerness to succeed in learning to type. However, several other factors may affect the student's continued determination to make progress:

- The instructor's professional teaching preparation
- The teacher's skill at the typewriter
- The individual analyses and motivation provided each student
- The degree of development in the student of self-confidence, self-competition, and desire to attain new competency levels
- The typewriting equipment and classroom setting
- The quality and appropriateness of the instructional materials

These are only a few of the influences which bear upon the attainment of students.

This syllabus has been designed to help teacher and student attain a high level of performance in typewriting. Precise and carefully considered student performance standards have been identified for each level of learning and skill development. Many suggestions are provided to the teacher for individually paced student progress and for keeping the initial motivation of students high. In addition, a related series of Competency Tests make it possible for each student to push forward at his/her maximum pace.

It is believed that this syllabus and allied testing material will make an unusual contribution to the success of every typewriting program. The skillful typewriting teacher will undoubtedly find this syllabus a very effective teaching guide to be kept on the desk for ready reference. Furthermore, the instructional strategies which are incorporated in this syllabus should become a part of the typewriting teacher's motivational tools.

Hobart H. Conover, *Chief*
Bureau of Business Education

Douglas T. Adamson, *Director*
Division of Occupational Education Instruction

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Knowledge of the typewriter keyboard has positive transfer to the computer console.

CHAPTER 1

ADMINISTRATIVE CONSIDERATIONS

Typewriting is recognized as an essential written communication skill second only to handwriting. Ability to use a typewriter is a basic requirement in most business offices. It is also an important tool for many educational, social, and avocational activities. Regardless of their career objectives, almost all students will profit from a course in typewriting. A valid function of the secondary school is to give students the opportunity to acquire this important skill.

Typewriting must be properly taught by qualified teachers to be fully effective. Teachers assigned to teach typewriting, therefore, should be fully licensed business teachers, who have taken special methods courses in the teaching of skill subjects, including typewriting.

Schools should consider the availability of typewriting facilities and equipment in planning the number and kinds of typewriting courses that will be offered. The needs of students desiring to prepare for employment upon graduation from high school should be given first priority. After these needs have been met, consideration should be given to the educational needs of nonbusiness students. Many academic students in grades 11 and 12 may desire a course in personal typewriting.

If all typewriting facilities are not being utilized to capacity, a school should then consider the possibility of offering typewriting instruction in the lower high school grades or in the junior high school.

This syllabus is organized so that both occupational and personal-use students can be scheduled initially in the same typewriting classes. The modules are so arranged that pupils may progress from one level to the next as achievement and interest may indicate. Whenever possible, however, class sections should be scheduled for students of about the same age, interests, and grade level. In the larger high schools, in particular, it is recommended that occupational and personal-use typewriting students be scheduled separately. This procedure makes it possible for the teacher to emphasize those applications most closely related to the purpose of the total class.

Syllabus Organization

Nine modules of instruction are outlined in this syllabus. Each module identifies specific student performance standards and appropriate evaluation measures. The nine instructional modules are as follows:

1. Keyboard Mastery and Skill Development (Students who are terminating after this first module should be expected to pass the Level 1 Typewriting Competency Test.)
2. Basic Typewriting Competencies

2a. Personal Use Typewriting

3. Introduction to Office Typewriting (Part I)

4. Introduction to Office Typewriting (Part II)
5. Intermediate Office Applications (Part I)
6. Intermediate Office Applications (Part II)
7. Advanced Office Applications
8. Culminating Office Applications

The following paragraphs suggest how the nine instructional modules may be used in the various typewriting courses or within the framework of *Office Practice* or *Secretarial Practice*.

Typewriting I, a 2-semester, 1-year typewriting course is designed to develop initial occupational competency. Students will be expected to complete the content and reach the proficiency standards as outlined in Modules 1, 2, 3 and 4. These four modules should result in the mastery of those typewriting skills and knowledges required in typical office positions open to typists, clerk-typists, and secretarial workers.

Students who successfully complete the first four modules may receive one unit of credit that may be used in several of the business curriculums and three-unit sequences. Regents diploma credit will be awarded the student who passes levels 1, 2, 3, and 4 of the Typewriting Competency Tests, including a 5-minute timed writing, with a minimum net speed of 30 words per minute after no more than 5 total errors.

Typewriting I is recommended as a prerequisite for students specializing in stenography, office practice, or machine transcription. This will necessitate scheduling *Typewriting I* at grade 10 for most students who are interested in pursuing a vocational business sequence or curriculum. Students in grades 11 and 12 enrolled in a nonbusiness sequence who wish a thorough course of instruction, should also be encouraged to complete this full-year course.

Personal Typewriting is a one-semester, accelerated course that should be open only to the more able students in grades 9 through 12 who are nonbusiness majors. The course emphasizes those knowledges and skills needed by students preparing for college, or for those desiring practical typewriting skills considered essential in handling everyday personal communications. This course carries one-half unit of credit toward a Regents or local diploma for those students who complete modules 1 and 2a and attain the student performance standards as specified in these modules. Credit may be used as an elective in group III, high school diploma requirements.

Personal Typewriting is not intended to prepare students for immediate business employment. Teachers are expected to prepare their own examinations or to utilize *Tests 1 and 2A* of the *Typewriting Competency Tests* to evaluate student achievement.

Students who have taken a beginning noncredit typewriting course in grade 7 or 8 and who can demonstrate satisfactory proficiency on *Typewriting Competency Test No. 1* may be permitted to continue the development of typewriting skills by pursuing the content of Module 2 in *Typewriting I*. Upon completion of the performance standards of *Typewriting Competency Tests* 2, 3, and 4, the students may receive one unit of credit in *Typewriting I* that will apply toward meeting Group II or III high school graduation requirements.

Advanced Typewriting Instruction

Modules 5 through 8 of this syllabus are designed for advanced typewriting instruction. Schools will find these modules to be ideally suited to the advanced typewriting instruction planned for *Office Practice 1*, *Office Practice 2*, *Secretarial Practice*, or *Typewriting 2*. Schools that follow the recommended State sequence of *Office Practice 1* and *Office Practice 2* will be expected to use Modules 5-8 in the two-year sequence. Advanced typewriting instruction in *Secretarial Practice* should be based on Modules 5, 6, and 7. If time permits, students who demonstrate proficiency in achieving the performance objectives of Module 7 should be encouraged to advance to Module 8.

SUMMARY

Student Objective	Course Title	Modules	Suggested Grade Level	Course Credit
To learn basic touch typewriting skills	Keyboarding or Introductory Typewriting*	1	7,8	No credit
To learn touch typewriting and personal use skills	Personal Use Typewriting	1,2A	9-12	1/2 unit
To acquire entry-level skills in typewriting and business applications	Typewriting 1	1,2,3,4	10-12	1 unit
To master a broad range of business applications and occupational skills	Typewriting 2,	5,6,7,(8)**	11,12	
	Office Practice,	5,6,7,8	11,12	See Office Practice Syllabus
	or			
	Secretarial Practice	5,6,7,8	11,12	See Secretarial Practice Syllabus

*Module 1 may be variously used in local educational agencies to introduce students to touch typewriting or as the basis for transfer to input machines with similar keyboards.

**It is expected that the average student will complete Module 7 by the end of Typewriting 2; but Module 8 is available for the more competent student.

CHAPTER II

GENERAL AIMS AND OBJECTIVES

The student in a typewriting class has the opportunity to learn many things in addition to the technical skills of operating a typewriter. To be effective, therefore, a variety of general aims and goals of learning should be realized by all students. They are:

Even touch. The student should be able to operate the keyboard with correct fingering, a skillful even touch, and with sufficient dexterity to keep the carriage moving smoothly.

Machine parts. The student should be able to refer to the parts of the machine by name and use each part correctly, i.e., the platen for the cylinder or roller, space bar, ribbon, and line-space gauge.

Machine differences. It is desirable to assign a student to one machine for the purpose of developing confidence. However, special characters, differences in the operation of certain machine parts, and differences in touch make it advisable to rotate the students on the other makes of machines available.

Attractive copy. When the student finishes the prescribed learning period in a beginning typewriting course, he should know what constitutes attractive typescript. Examples of the desired product should be available.

Basic appreciations. In a 1-year or 1-semester typewriting course, the teacher should not attempt to bring in too great a variety of typing problems, styles, and arrangements. Good, basic styles and the most common applications will hold the interest of students and help to develop confidence. With this growing consciousness, the student will realize why she is learning to typewrite in the first place — to make written material more easily read and understood.

English mechanics. The typing student must be able to punctuate properly, even though the copy does not supply these details. Part of the learning of any 1-year typewriting course should include the review of sentence structure and punctuation.

Spelling. Students should be able to use all parts of the dictionary to apply correct English usage to typewriting.

Work priorities and decision making. A variety of problem situations should afford the student the opportunity to make decisions as to form and arrangement. Typewriting students are apt to become overly dependent on a textbook, if it is too explicit, leaving little to their own judgment.

Adaptability. Students must be encouraged to keep an open mind in regard to variations in styles and procedures. Various offices or employers have favorite styles that they require in their work. Students must become aware of the need for adjusting to office standards set down by employers.

The aims and objectives which follow deal with the overall competencies which students should obtain from the study of typewriting. This is not designed to represent a complete or exhaustive listing. Rather it illustrates some of the specific aims and objectives common to a typewriting course. Each of the modules of content prescribes very specific student performance standards as related to levels of skill development and types of applications. The objectives listed here are indicative of the non-skill outcomes that should be expected from typewriting instruction.

Operating Technique

- To know the name, use and location of common parts of standard typewriters
- To learn the touch operation of the keyboard by location of keys
- To develop rhythmic stroking technique to build speed and accuracy
- To learn posture which promotes efficiency at the typewriter
- To learn the preparation of materials at the machine for maximum efficiency
- To develop technique mastery to permit easy adjustment to a different machine

Effective Arrangement

- To develop logically, from simple to complex, a knowledge of attractive arrangement
- To understand the preference for certain styles
- To develop appreciation of the horizontal and vertical use of white space
- To automate basic arrangement of typewritten material: capitals, indentions, spacing after headings, punctuation, special signs, etc.

Ability to Follow Instructions

- To learn to listen and watch attentively and to read directions carefully
- To develop the skill of questioning when directions are not clear or not understood
- To learn note-taking during presentation of initial directions
- To develop the desire to satisfy the one for whom the work is to be done
- To respect deadlines set for work schedule
- To learn to set up, keep and check for completion one's own records
- To develop an appreciation of the coordination of speed and accuracy of work

Care of Equipment and Supplies

- To learn respect for the machine as an investment and tool
- To develop an awareness of unnecessary abuse of machine parts

- To learn basic care of machine: brush, dust, wipe, oil
- To learn to clean type, change ribbon, and do simple maintenance tasks
- To learn to report immediately the need for repair, to save fallen parts, and to treat machines with care

Desirable Personality Traits

- To develop an appreciation of excellence
- To develop a cooperative and courteous attitude
- To learn the tactful manner required to suggest changes to superiors

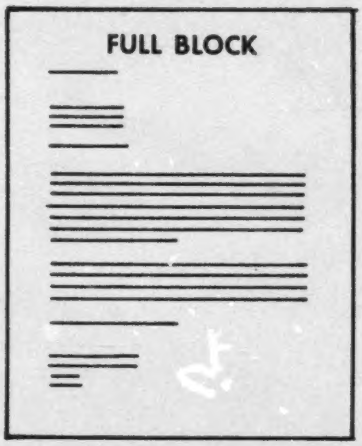
Related Learnings

- To appreciate the need for accurate work
- To appreciate the need for good technique and efficiency
- To place typewriting in proper perspective regarding the student's future
- To retain and improve skill in punctuation, spelling, syllabication, capitalization, and the use of the dictionary
- To develop alertness to errors
- To develop an attitude of acceptance of the inevitability of inaccuracies and the need to correct them expertly
- To develop an appreciation of the speed of correcting as compared to the waste of full retyping
- To appreciate the differences in materials for varied purposes: paper, carbon, ribbons, erasers, etc.

Specialized Applications

- To compose at the typewriter and take dictation directly at the machine
- To realign material expertly, using carriage scale, variable line spacer, and paper release
- To learn the specialized vocabulary of the typist

COMMON LETTER STYLES



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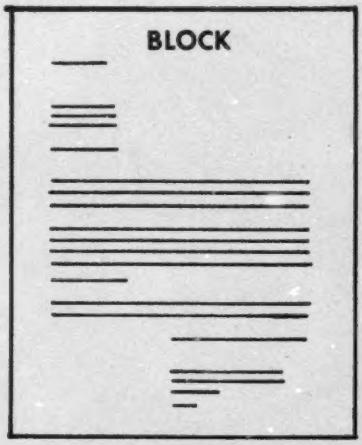

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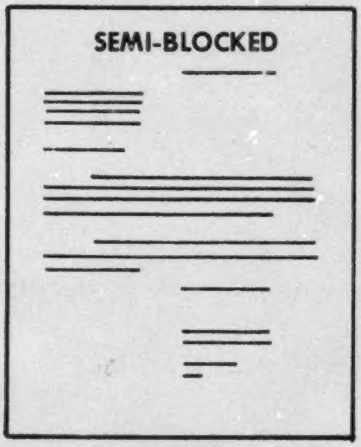

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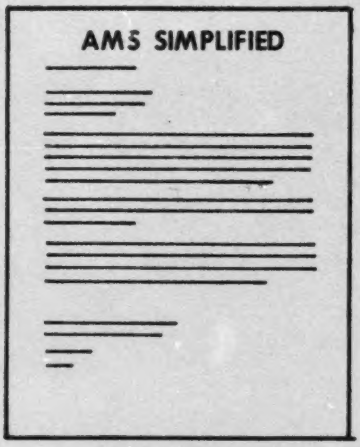

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CHAPTER III

THE ORGANIZATION OF THE INSTRUCTIONAL MODULES

Teachers in all subject areas in recent years have felt the need to reorganize their classes at various times from large group, teacher-dominated instruction into small group or individual instruction that is more teacher-student directed. There is evidence that students who have formed patterns of failure can be stimulated to learn by more individualized instruction; in fact, students who have little motivation to learn will fast become school dropouts or intellectual dropouts if they are not provided with some individualized instruction.[1] There is also evidence that some teachers organize their classes with flexible scheduling so that few students are hampered by a time factor.

> Ninety percent of all students can learn what we have to teach them if we will allow *time* to be the variable. In other words, the slow learner needs more time to learn what the fast learner can master in a rather short period of time.[2]

So, too, teachers of typewriting have felt a need for reorganizing their classes into smaller groups or for individualized instruction and for providing flexibility in scheduling to avoid penalizing the student unjustly for taking longer to do what other students do in a short time. Therefore, the *New York State Typewriting Syllabus*[3] has been revised to reflect these growing concerns and trends. The new modules provide measurable student performance objectives which allow students to move at a pace commensurate with their individual ability and incentive.

The research quoted, the principles stated, and the nine modules in this revision of the Syllabus are meant to suggest teaching strategies to the experienced teacher as well as to the new teacher. The teacher and students working together now are able to select short- and long-term goals, varied learning activities, and appropriate learning resources for large group, small group, and individual instruction.

All of the typewriting skills to be learned by an office education major *have* been organized into eight modules. Upon completion of *Module 1, Keyboard Mastery and Skill Development,* the students will have learned proper operation of the typewriter using the touch system. This basic proficiency

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[1] John Rye Kinghorn and Jos. E. Paden, "Individualized Instruction Especially Helpful to Non-Conforming Students," *Pennsylvania School Journal,* February, 1971, pp. 204-205, 235, 237.

[2] B. S. Bloom, "Learning for Mastery," *Evaluation Comment,* Center for the Study of Evaluation of Instruction Programs, University of California, Los Angeles, 1968.

[3] *Syllabus and Teaching Suggestions for Courses in Introductory Typewriting, Typewriting I, and Personal Typewriting,* Bureau of Occupational and Career Curriculum, The State Education Department, The University of the State of New York, Albany, 1967.

may be sufficient for certain occupations where minimal keyboarding is required. Students who take typewriting for personal use are expected to complete *Modules 1 and 2A*. Each module addresses itself to an integrated unit of learning and begins with performance objectives for that module. New terms are defined here with meanings appropriate to this syllabus.

Definitions

competency test - a measure of a student's ability to complete specific tasks under controlled conditions at a minimum level of performance. A competency test is provided for the student at the end of Modules 1, 2, 3, 4, 5, and 6. Each test measures some but not all of the performance objectives listed at the beginning of that module.

criterion-referenced measure - an assessment made in terms of a specific criterion against which a student's performance is compared.

en route goal - identified by analysis of subcompetencies essential to successful achievement of the performance goals of a module.

form error - an error in placement, margins, spacing, or other error in achieving established standards, such as erasing and neatness. All errors other than keyboarding errors.

interim checkup - assesses progress toward achievement of an en route goal. Successful completion of all of the en route goals in a module prepares the student for the competency test for that module.

module - an instructional resource tool used by the teacher for instructing and directing students toward a stated goal.

norm-referenced measure - conveys information about the capability of a student compared with that of other students.[4]

performance goal - states a measurable behavior, the product to emerge from the performance, the conditions under which performance will be conducted, and the criterion (standard) on which performance will be judged.[4] Sometimes the words *behavioral objective* are used to describe the goal. The terms are interchangeable.

teaching strategy - an organized plan in which the teacher establishes conditions that enable the students to reach the identified goals in as efficient a manner as possible.[4]

typing error - a keyboarding error. Errors made by striking incorrect keys, misuse of the space bar, or improper use of the shift key.

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[4]Estelle L. Popham, Adele Frisbie Schrag, and Wanda Blockhus, *A Teaching-Learning System for Business Education*, Gregg and Community College Division, McGraw-Hill Book Company, New York, 1975, pp. 67, 91, 117.

The Modules

The nine modules in this syllabus are inclusive of all typewriting instruction at the secondary level. A school, by its own choice, will apportion certain of the modules as minimum requirements for its personal typewriting, first-year typewriting, its second-year typewriting and clerical/office/secretarial practice classes. The school should also provide options in each course for additional typewriting study for those students capable of achieving beyond the minimum required number of modules. The student also should have the option of using the same module again to move from a minimal to a superior achievement level. Each module contains the same parts.

- performance objectives
- skill development
- content
- suggested teacher and student activities
- interim checkups
- suggestions for evaluation

Performance objectives.

PRINCIPLE: *Considerable evidence is available that the learner needs to have a target (a behavioral objective) as a guide to influencing his behavior.*[5]

Performance objectives for each of the modules in this syllabus spell out for the student and for the teacher what the student will be able to do at the end of the module. The teacher should present the performance objectives to the student, prior to instruction, to ensure that the student knows what is expected.

Skill development.

PRINCIPLE: *Deliberate programs for building stroking speed and accuracy (should) immediately follow keyboard presentation and (should be) applied periodically through much of the training thereafter.*[6]

Skill development exercises are suggested as a part of each module. For convenience, appropriate skill development content is summarized at the beginning of the module. Use of this skill development content should not equate to the first day or days on the module, but rather should become an integral part of each day's lesson. Every class period should begin with 10 to 15 minutes of conditioning or warmup drills taken from the problem material to be covered that day.

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[5]Lawrence W. Erickson, "The Teaching of Typewriting," *Contributions of Research to Business Education*, Yearbook No. 9, National Business Education Association, Washington, D. C., 1971, p. 27.

[6]Leonard J. West, *Implications of Research for Teaching Typewriting*, Research Bulletin No. 4, Second Edition, Delta Pi Epsilon, 1974, p. 11.

Content.

PRINCIPLE: *Every task assigned to the student must be made as meaningful as possible.*[7]

The content portions of the modules in this syllabus are presented in outline form, for each reference. The student should see the relationship between what he/she is asked to learn or practice and the performance required in the next interim checkup; and, in fact, the student should see the relationship between that learning or practice and the *performance objectives* of that module.

Suggested activities.

PRINCIPLE: *Not only must the teacher know the whole constellation of skills involved with their clusters of subskills, but he must also be able to demonstrate the correct pattern of performance, not only in its entire, smooth performance, but also in its individual and involved parts.*[8]

Each module provides suggested activities that the teacher can provide for the student, including use of visual equipment, illustrations, examples, and teacher demonstrations.

Interim checkups.

PRINCIPLE: *It is essential that every learner works only on those en-route goals relating to individual deficiencies, not to those learnings already mastered.*[9]

Interim checkups identify subcompetencies a student must possess in order to achieve the performance objectives of that module. The checkups in these modules are sequenced and positioned at appropriate places in the module. As the preceding *Principle* suggests, the student is able to prepare to retake an interim test for which he failed to develop the needed competency. The student does not have to waste time on subordinate goals for which he/she does have competency. However, the only sure way the student can know if the expected learning has taken place is by achieving the standards of the interim checkups. To achieve the performance goals listed on the first page of a module, the student must be able to achieve the standards of the interim checkups, including the "time" factor. Note that in some of these modules time allotments for the interim tests may be more generous than the time allotments for the same activity during the competency test. This is explained in that the time criterion of an interim test is appropriate *at the time the student is learning the skill.* The time

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[7] Erickson, *op. cit.*, p. 30.

[8] K. C. Garrison, A. J. Kingston, and A. S. McDonald, *Educational Psychology*, Second Edition, Appleton-Century-Crofts, New York, 1964.

[9] Estelle L. Popham, "Making Business Education Meaningful with a Competency-Based Curriculum," *Business Education World*, Vol. 55, No. 5, (May-June), 1975, p. 6.

allotment on the competency test is appropriate *at the time the student has finished the entire module.*

Competency.

PRINCIPLE: *Every typewriting student needs to know how he is doing, i.e., what he is doing correctly and therefore should continue; and what he is doing that needs to be changed, improved, or eliminated. The answer to the question, "How am I doing?" is known as knowledge of results, and it is essential for speedy and effective skill learning.*[10]

The competency test is entered into when the student has demonstrated achievement on each of the interim tests for a particular module. When the competency test has been passed, at least at a minimal level, the learner is ready to advance to a succeeding module. There are three comparable forms of each competency test: Form *A*, Form *B*, and Form *C*. Therefore, for grading purposes the student has three opportunities, if needed, to demonstrate ability to meet the performance objectives of each module. The teacher should confer with the student who has failed a competency test to establish what it is that the student does not know how to do. From that knowledge, the teacher should help the student outline a series of exercises designed to teach the learner what is not known, and a date should be set during this conference for retaking the test at an appropriate future date.

[10]Erickson, *op. cit.*, p. 31.

CHAPTER IV

PRINCIPLES OF LEARNING TYPEWRITING

PRINCIPLE: The extent to which the learner is an active participant in the learning process affects his skill learning.[11]

To be an active participant in learning to type, the student needs at all times to know and understand the performance goals and how to evaluate her/his progress toward them. Following are a set of guiding principles, not meant to be inclusive, which may help the teacher guide the student.

A. *The Student Needs to Know and Understand*

1. *the target.*

PRINCIPLE: The learner must perceive what is to be learned as relevant.[12]

The student needs to know the goal toward which he/she is working at any particular time and how the series of en route targets measured by the interim checkups prepare him/her for successful completion of the competency tests.

2. *typewriting skills are unique.*

PRINCIPLE: Every learning task requires its own specific learning ability, and typewriting seems to be no exception.[13]

The student needs to know that previous success or lack of it in other endeavors plays little part in forecasting success or lack of success in learning to typewrite. The knowledgeable teacher will help the student who normally experiences *success* in school, but who is experiencing difficulty in learning to type, to understand this. Conversely, the teacher will help the student who normally experiences defeat in school understand that, regardless of past academic troubles or failure, the student may possess the native ability to learn to type successfully.

3. *the difference between doing it right and doing it wrong.*

PRINCIPLE: It is essential that the student be taught enough about any task so that he can tell the difference between doing it right and doing it wrong.[14]

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[11] Erickson, *op. cit.*, p. 31.

[12] Popham, *op. cit.*, p. 106.

[13] Lawrence W. Erickson, "The Teaching of Typewriting," *Contributions of Research to Business Education*, Yearbook No. 9, National Business Education Association, Washington, D. C., 1971, p. 19, in a reference to J. P. Guilford, *General Psychology*, Van Nostrand, New York 1940.

[14] Erickson, *op. cit.*, p. 19.

Students must know the difference between doing it right or wrong in all their practice and production work. In the earlier modules, especially, this means *right or wrong technique*. The student will find it difficult, for example, to ignore keyboard errors while perfecting technique. The teacher must provide guidance.

4. *how to evaluate progress.*

PRINCIPLE: The student needs to have the means to evaluate his own progress at any place along the route of instruction.[15]

There should be multiple opportunities for the learner to judge progress toward goals; and it should be made the responsibility of the learner to judge progress toward any given goal.

B. *The Student Needs to Know What To Do*

Typewriting students need to know that the subskills that make up what is called "the ability to typewrite successfully by the touch method" are attained by the development of basic techniques, reduction or elimination of waste motions, reduction of keyboarding errors, and appropriate practice. Above all, the student needs to know what to do to learn that which he/she needs to know.

1. *to develop basic techniques.*

PRINCIPLE: Building basic skill begins with the first lesson in learning to type and continues through all semesters of typewriting instruction. Speed and accuracy must each be the natural outcome of practice that has as its early goal that which underlies them both – right techniques for typewriting.[16]

The teacher must help the students from the beginning of instruction to understand that how the student practices is as important as *what* he/she produces when the purpose of practice is to build successful touch typewriting skill.

2. *to reduce or eliminate common waste motions*

PRINCIPLE: Common waste motions of the slow typist are in the use of the space bar, returning the carriage and starting the new line, using the shift key for capital letters, and pausing after an error was made. All these waste motion patterns can be reduced or eliminated, thus increasing speed.[17]

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[15] R. Mager, *Preparing Objectives for Programmed Instruction*, Fearon, San Francisco, 1962, p. 4.

[16] Jerry W. Robinson, ed., *Strategies of Instruction in Typewriting*, South-Western Publishing Co., Cincinnati, 1972, p. 12.

[17] Erickson, *op. cit.*, p. 24.

The student needs to know that common waste motions in typewriting can be reduced or eliminated rather easily. By special attention to these waste motions and by the use of special exercises and devices, the student under the teacher's direction may expect to experience success.

3. *to reduce keyboarding errors.*

PRINCIPLE: Many typewriting errors seem to be chance errors without specific causes or remedies. Some habitual errors may be eliminated through the use of appropriate corrective drills. The typing of some corrective drills that have been prepared, however, does not seem to be any more effective in eliminating or reducing errors than simply rewriting the copy in which an error or errors occurred.[18]

Keyboarding errors are less easily reduced than waste motions. The student should expect to continue making keyboarding errors, should know that reduction of keyboarding errors takes considerable time and effort, and should understand that total elimination of keyboarding errors is an unreal goal.

PRINCIPLE: An error score on one piece of work is not a particularly good prediction of the error score on the next piece of copy by the same typist.[19]

4. *to practice appropriately.*

PRINCIPLE: Appropriate practice is much more complicated than just having a student do a drill again or having him retype a particular problem. Repetition without a goal or without a change in the character of the practice is often worthless, but repetition with a purpose can and does dramatically affect the skill learning in a positive way.[20]

Purposeful practice provides an opportunity for the student to type a drill with purpose. The student should not repeat a drill without an updated purpose.

5. *to prepare for applications.*

PRINCIPLE: Students must understand the relationship between subcompetencies and competencies.[21]

Practicing skill building techniques and meeting en route goals have meaning only when the relationship between the subcompetencies is defined and the ultimate performance goals are understood by the student. Student

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[18]H. C. Rahe, "Review of Research in Typewriting," *Studies in Education*, Theses Abstract Series, No. 2, School of Education, Indiana University, Bloomington, 1950.

[19]Erickson, *op. cit.*, p. 24.

[20]*Ibid.*, p. 31.

[21]Popham, *op. cit.*, p. 180.

progress is enhanced when the student understands how mastery of one after the other of the subskills leads to successful completion of the larger goal.

The student should know that skills must be learned *before* they are used in application problems. This implies that the student should know what skills are necessary for a given application; it implies knowledge of skills already learned; and it implies knowledge of what to do about those skills required for the applications that have not yet been learned. It also implies that the student knows how to solve the application problem.

PRINCIPLE: A typist cannot solve problems until basic stroking facility and necessary cognitive learnings with which to work in arriving at solutions have been achieved.[22]

6. *to learn that which one needs to know.*

PRINCIPLE: Students have little insight into how learning to typewrite takes place. The teacher knows, as the learner cannot, what a particular practice method or strategy will do to improve or accelerate learning.[23]

Successful teachers *teach* typewriting and do not merely *assign* lessons to be completed. It is the teacher's responsibility to help the student understand how the practice and exercises help the student become a skilled typist. The student needs to know what to practice, how to practice it, how to evaluate success or lack of it, and what to do next.

PRINCIPLE: Practice should be conducted under conditions similar to those which will attend the use of the skill.[24]

Simply applied, this principle tells the student and teacher that if the student must type a letter, for example, all errors corrected, within 20 minutes on a competency test, that the student should have practiced completing a comparable letter, correcting all errors within 20 minutes. Or, if the test calls for a letter with two carbons, all errors corrected, within 20 minutes, the student should have practiced using two carbons, correcting all errors, all within 20 minutes.

PRINCIPLE: The procedures practiced should be those in which skill is desired.

This principle requires that the teacher refrain from asking a student to practice without a new purpose something that the student has already mastered. Rather, the student should devote time to mastery of material in which skill is needed.

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[22] *Ibid.*, p. 174.

[23] Robinson, *op. cit.*, p. 2.

[24] Howard Kingsley, (rev. by Ralph Garry), *The Nature and Conditions of Learning*, 2d ed., Prentice-Hall, Englewood, New Jersey, 1957.

STUDENT TYPEWRITING TECHNIQUE CHECK LIST

Student's Name_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Date_ _ _ _ _ _ _ _ _ _Class Section_ _ _ _ _ _ _

Scoring may be by: S or U; A,B,C,D,F; or 1,2,3,4,5					
MARKING PERIOD					
1	2	3	4	5	6

Position Checkpoints

1. Head and body erect _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
2. Body leaning slightly forward from hips _ _ _ _
3. Hips well back in chair _ _ _ _ _ _ _ _ _ _ _ _
4. Seated slightly to right of center of typewriter_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
5. Wrists held low and level _ _ _ _ _ _ _ _ _ _ _
6. Slant of palm of hand follows slant of keyboard _
7. Arms and elbows resting close to body, shoulders relaxed _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
8. Fingers curved_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
9. Right thumb above space bar _ _ _ _ _ _ _ _ _ _
10. Feet flat on floor_ _ _ _ _ _ _ _ _ _ _ _ _ _ _
11. Seated proper distance from machine _ _ _ _ _ _

Machine Operation

1. Paper inserted with twirl of cylinder knob_ _ _
2. Paper release used to release paper _ _ _ _ _ _
3. Light, staccato stroke_ _ _ _ _ _ _ _ _ _ _ _
4. Stroking smooth; carriage moving smoothly _ _ _
5. Carriage returned with flick of wrist; eyes on copy; carriage not "slammed;" hands returned immediately to keys_ _ _ _ _ _
6. "Hinge" motion used when shift key is needed_ _
7. Capitals on line of writing (shift key control)_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
8. Backspace key, margin release, and tab mechanism operated by touch _ _ _ _ _ _ _ _ _
9. Correct fingering used for all keys _ _ _ _ _ _
10. Typing at proper letter, syllable, word, or phrase level _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Mind Set

1. Strongly motivated toward proper technique_ _ _
2. Seeks improvement _ _ _ _ _ _ _ _ _ _ _ _ _ _ _
3. Follows directions or suggestions _ _ _ _ _ _ _

CHAPTER V

PRINCIPLES OF TEACHING TYPEWRITING

As noted elsewhere, the student does not intuitively know what to do to learn to typewrite. The teacher, by training and experience, does know what the students as a group and as individuals in unique situations need to do to learn. Following are a set of guiding principles, not meant to be inclusive, from which a teacher can proceed. In most cases, the references cited are far more complete in their treatment of the subject than the excerpts included here.

A. *Reveal to the Learner What is Expected of Him/Her Prior to Instruction.*

PRINCIPLE: The student should know not only the specific performance expected, but also precisely how attainment of the goals will be evaluated.[25]

As a means of ensuring that the learner know what is expected of him, various practitioners have suggested revealing to the learner, prior to instruction, those tasks (or instructional objectives) he will be expected to perform (or demonstrate) after instruction.[26]

B. *Help Students Type Rapidly and Fluently.*

PRINCIPLE: At any and all stages of training, the proper major emphasis should be on, and the major amount of practice time should be devoted to, speed.[27]

West supports this principle with reference to numerous research studies. Robinson gets at the same principle in a different way:

> Teachers want to help their students learn to type with speed *and* accuracy, but teachers should not make the mistake in confusing the goal, which is an ultimate one, with the immediate purpose of practice, which is the initiation and refinement of techniques that are the underlying prerequisites for speed and accuracy.[28]

C. *Help the Student Correctly Identify Form and Typing Errors.*

The performance objectives for the modules in this syllabus make note of form errors and typing errors. Correct identification of types of errors aids students in knowing what they need to learn.

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[25] Popham, *op. cit.*, p. 109.

[26] Erickson, *op. cit.*, p. 27. The practitioners referred to are Mager, 1962; W. J. Popham, 1965; and Bloom, 1968.

[27] Leonard J. West, *Acquisition of Typewriting Skills*, Pitman Publishing Corporation, New York, 1969, p. 286.

[28] Jerry W. Robinson, ed., *op. cit.*, p. 6.

D. *Alternate Drives for Speed and Accuracy.*

PRINCIPLE: The ideal is for each student at all times to practice according to his needs – for speed or for accuracy, as the case may be – and to change his practice emphasis from speed to accuracy and the reverse according to his achievement of the goals for the one kind of practice before switching to the other.[29]

In practice sessions the student should not work for speed and accuracy at the same time. Short doses of speed goal emphasis and accuracy goal emphasis are not good either. Focus should be on one or the other until a substantial goal is met. In setting the goal, the student should not be trying to "do better." The goal should be specific; that is, for example, 36 wam goal for three minutes (when the previous goal met was 35 wam for three minutes); or 6 errors in three minutes (when the previous goal met was 7 errors in three minutes).

E. *Expect Students to Continue to Make Typing Errors.*

PRINCIPLE: Everyone makes errors when he practices a new skill. It is natural and normal to do so.[30]

Some students find it difficult to allow themselves errors as they practice a new skill or push for speed. Psychologically, they have an "accuracy set." It deters them from reaching the goal set. The teacher should help such students adopt practice of the right kind, at the proper level, and with a carefully defined purpose. "Speed has proved to be more amenable to training than accuracy."[31]

F. *Demonstrate Skills and Subskills.*

PRINCIPLE: "Show-how" is more effective as a teaching strategy then "tell-how." A good demonstration is always good teaching because it is easier for the student to imitate the pattern of easy, flowing movements as demonstrated by the teacher than to make these movements from hearing them described or from reading explanations of how they are to be made.[32]

West reminds us that:

> Some aspects of teaching of machine operation can effectively be demonstrated by the teacher to the class (e.g., paper removal and insertion). Others cannot effectively be demonstrated and must be left for students to discover for themselves (e.g., stroking rhythms). Some demonstrations are to be seen (e.g., assembling a carbon pack in the machine);

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[29] Leonard J. West, *Implications of Research for Teaching Typewriting*, Second Edition, Research Bulletin No. 4, Delta Pi Epsilon, 1974, p. 11.

[30] D. D. Lessenberry, and others, *Teachers Manual for Century 21 Typewriting*, South-Western Publishing Company, Cincinnati, 1972, p. 19.

[31] Erickson, *op. cit.*, p. 24.

[32] Robinson, *op. cit.*, p. 4.

others are to be heard (e.g., the sound of stroking at a particular speed). The chief thing to bear in mind about visual demonstrations is that they are useless unless everyone can see exactly what you want him to see."[33]

G. *Provide Controlled Timed Writing Copy.*

PRINCIPLE: Copy of (average) difficulty, therefore, should be used to measure the skill level (and growth) of the student from fairly early in the typewriting program to the end.[34]

Robinson indicates that a typing teacher must take into account the triple-control concept as it applies to the standardization of difficulty levels in testing instruments used periodically throughout a typewriting program. Assess not only levels of performance but also progress from grading period to grading period. The three known factors of copy difficulty – syllable intensity, average word length, and percentage of common words – must be known and equated before performance scores reached on the various copy selections can be said to reflect skill growth alone. If the copy selections are not equated, results in testing become contaminated by the effects of the inevitable variability of difficulty of the testing instruments themselves.

H. *Observe Weaknesses and Strengths as the Student Practices; and Capitalize on the Student's Strengths.*

PRINCIPLE: The intelligent observation of students at work is a valuable activity for the teacher. This is the analysis function at its best.[35]

The analysis function involves observing student performance to determine areas where teaching and learning emphases need to be placed next. Application of this principle indicates that part of the teacher's task is to watch students as they work – stroking of the keys, using the space bar, and manipulating the other parts of the typewriter. Such observation provides clues for the process of evaluation; whereas, the finished product never does provide adequate clues as to the student's manipulative skills. Robinson states, "Observation of student practice must center on the pattern of action and not on the results of that action, the typed line or page."[36]

The wise teacher provides immediate positive reinforcement to the student who is using proper procedures and provides immediate help to the student who is not using correct procedures.

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[33] West, *Acquisition of Typewriting Skills*, p. 135.

[34] Robinson, *op. cit.*, p. 23.

[35] *Ibid.*, p. 17.

[36] *Ibid.*, p. 6.

I. *Provide Remediation for Students — Group and Individual.*

PRINCIPLE: *Hold the line on recycling when learners do not achieve what they should. Don't weaken.*[37]

A student who tries to go on to meet a future goal without having achieved a present goal meets disaster because succeeding goals have even higher requirements. Ideally, each student who fails to meet a goal should *immediately* be directed (recycled) to appropriate skill development routines and materials. In actual practice, the teacher may provide adequate practice time through flexible scheduling for large group, small group, or individual activities.

J. *Make Every Task Assigned to the Student as Meaningful as Possible.*

PRINCIPLE: *Every task assigned to the student must be made as meaningful as possible. That includes drill materials (which should always have an assigned purpose and be practiced at assigned levels) as well as problem and production materials.*[38]

Good teachers handle groups, but teach individuals, motivating each to know his proper goal of practice and the best procedure to use to achieve the goal.[39]

K. *Know What is Important and What is Unimportant in Typewriting.*[40]

PRINCIPLE: *During the early weeks devoted to keyboard learning and copying skills, the stress should be on gross speed, not accuracy. Start production training early (Week 6 or shortly thereafter) and give exclusive or nearly exclusive attention to it continuously thereafter.*[41]

Straight copy skills are significant only for some employment testing. The important point is that no typist copies line for line from perfect copy without regard to errors.

PRINCIPLE: *Begin production training very early with explicit instruction and practice in making placement decisions, followed by student work from unarranged copy requiring him to make placement decisions without advance guidance from the teacher or the textbook — but immediately followed by confirmation or correction of students' products.*[42]

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[37] John L. Rowe, Alan C. Lloyd, and Fred E. Winger, *Teacher's Service Manual for Typing 300*, 5th ed., Gregg Division, McGraw-Hill Book Company, New York, 1973, p. E6.

[38] Erickson, *op. cit.*, p. 30.

[39] Robinson, *op. cit.*, p. 15.

[40] Erickson, *op. cit.*, p. 30.

[41] West, DPE Research Bulletin No. 4, p. 24.

[42] *Ibid.*, p. 24.

West defines *guidance* as explicit advance instructions to the learner before he responds, and he defines *confirmation* as responding without advance assistance, but with the learner's response immediately followed by confirmation or correction by the teacher or other agency.

L. *Reinforce Learning.*

PRINCIPLE: *Switch early from guidance to confirmation procedures, in which a display of the correct response (by the teacher or in the textbook) follows rather than precedes the learner's response.*[43]

The question for instruction is when and for how long should one furnish learners, in advance of their response, with a model that is to be copied, in contrast to requiring them to respond before they are provided with a model against which they can check the correctness of response.

Guidance is helpful if given in very small amounts confined to the earliest stages of learning any new thing; given in large amounts or past the earliest stages of instruction, it is inferior to confirmation.[44]

PRINCIPLE: *Reinforcement of learning is one of the most important factors affecting the rate and degree of learning.*[45]

M. *Teach Students to Correct Copy.*

PRINCIPLE: *At that point in the typewriting program when students begin applying their basic skills in the solution of either personal or business problems, erasing and correcting of errors should be taught, drilled on, and called for frequently in the application activities.*[46]

Recent developments in the field of word processing indicate that typewriting instruction must include ample opportunity for production of copy that has been corrected, by the best means available to the student. The teacher may direct the students to Module 5 to learn to erase and/or use correction paper or fluid. It is recommended that normally the student will probably benefit most if erasing is learned as a part of Module 5, or for Personal Typewriting students, as a part of Module 2A.

N. *Provide Individualized Instruction.*

PRINCIPLE: *The student must "intend to learn" if he is to learn. In terms of level of instruction, appropriate goals must be set for every student in terms of his abilities and his need.*[47]

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[43] West, *Acquisition of Typewriting Skills*, p. 41.

[44] West, DPE Research Bulletin No. 4, p. 26.

[45] Erickson, *op. cit.*, p. 32.

[46] Robinson, *op. cit.*, p. 25.

[47] Erickson, *op. cit.*, p. 32.

To accept this principle and make it operative, the teacher must provide some measure of individualized instruction. In its truest sense, individualized instruction provides that the teacher assess students and present them with a wide range of objectives, leaving to the students the choice of which ones they wish to achieve. Then students are free to choose from the facilities and resources availabie the means to achieve their chosen objectives. When students feel they have achieved the objectives sought they present themselves for testing. As any typewriting teacher knows, many students are able to achieve with, and at the rate of, the large group. Others are capable of making advanced achievement at a faster rate; and still others are incapable of achieving at the rate which is comfortable with the group. Individualized instruction provides a solution for these students who, for whatever reason, are "out of line with the average." Research also suggests that there is actually less need for individualized instruction for students who come from homes where education is held in high esteem. Conversely, individualized instruction seems to be a valid instructional strategy for students who have a history of under- or non-achieving.

O. *Provide for Advanced Achievement.*

The teacher should be aware of the student who should not spend time in working toward a particular goal in common with other students in the class, but rather, be given a chance to show his or her competency. Then he/she may spend time working at an advanced level in typewriting or even for an objective in which typewriting may be only incidental at the moment. No student should be encouraged to perform at a level which is definitely below the potential level at which he or she could achieve.

Teacher Self-Evaluation Scale

In order to be an effective instructor of Typewriting, I:	Yes	No
1. Carefully analyze the aims and objectives of each typewriting course being taught		
2. Develop a time schedule which provides the appropriate emphasis upon the various areas of typewriting instruction to be included in the course		
3. Plan daily class procedures which insure intensive and efficient use of class time		
4. Promote a positive classroom atmosphere: observe students at work; give constant encouragement and constructive individual criticism; demand office-type atmosphere; and stimulate desire to excel		
5. Demonstrate correct typewriting technique whenever the instructional needs warrant it		
6. Advocate practices conducive to self-evaluation by:		
a. Encouraging students to analyze their own performance		
b. Encouraging students to set individual goals		
c. Encouraging students to evaluate their finished work		
7. Emphasize good typing technique throughout the entire typewriting course		
8. Review all typing assignments carefully before they are made by:		
a. Actually performing the assignment to determine the level of difficulty and time requirements		
b. Providing for individual differences in developing assignments		
9. Employ a variety of typing drills, making certain that students understand the purpose of each drill		
10. Coordinate instruction with other subject matter areas by:		
a. Correlating typing assignments with other courses		
b. Interdepartmental planning of instruction		
c. Incorporating English mechanics, spelling and grammar as a regular part of the daily instruction		
11. Provide for a motive and incentive awards program		
12. Utilize a variety of instructional materials:		
a. Various textbooks and reference books		
b. Specialized practice materials		

	Yes	No
c. Actual business papers		
d. Appropriate reference books		
13. Make use of appropriate visual aids: model solutions, posters, charts, illustrations, films, filmstrips, etc.		
14. Conduct followup studies of graduates to evaluate on-the-job success		
15. Conduct informal classroom research or experiments		
16. Establish performance standards compatible with those used by business organizations		
17. Make periodic visits to local business establishments to ascertain scope of typical typing problems		
18. Strive to keep equipment up to date		
19. Maintain appropriate records on individual items of equipment		
20. Provide continuous, comprehensive, cooperative evaluation procedures which emphasize student growth		
21. Provide for pupil participation in classroom management		
22. Seek professional growth by:		
a. Actively participating in professional organizations		
b. Reading professional literature		
c. Attending workshops, courses, etc. in advanced methods		
d. Attempting experiments in classes and reporting on findings to professional organizations, graduate courses, or professional magazines		

The following scale is suggested for rating oneself in the 33 recommended practices included above.

Superior	26-33
Average	20-25
Need for improvement indicated	Below 20

CHAPTER VI

EVALUATION AND GRADING

PRINCIPLE: Evaluation, properly utilized, should serve at least three purposes:

1. *it should suggest changes in practice activities for improvement,*
2. *it should help the teacher and the student diagnose typing difficulties, and*
3. *it should provide knowledge of results for reinforcement of the learning or for measurement purposes (grading.)*[48]

Students must be taught to compare their results with a model or desired product. This encompasses form, placement, proofreading, and grading. Students must become proficient in self-analysis of techniques or performance. This objective can be achieved only through a clear statement and demonstration of goals.

PRINCIPLE: It is essential that the student be taught enough about any task so that he can tell the difference between doing it right and doing it wrong. He must be able to evaluate his own attempts at performing each of the typing tasks which he is assigned, and he must decide (often he will need teacher help) what changes in his performance are needed.[49]

Critical judgment on the part of the student must be based on acceptable knowledge of what the finished product should be and what it should look like. Student judgment of success or lack of success in the learning process calls for real student knowledge of what is skilled performance and what is not skilled performance.

Teacher observation, interim checkups, and competency tests, separately or in combination, are used to give the student as well as the teacher the opportunity and responsibility for determining if learning has taken place.

PRINCIPLE: Learning is more effective when the learner knows the immediate goal to be met and when the learner is aware of the progress being made toward the stated goal.[50]

The advantages of student involvement in evaluation are obvious. The student must ask, "Did I achieve this objective?" "If not, what portion of it needs my attention?" "What must I do to achieve it?" The teacher helps the student in making self-evaluations as objective as possible.

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[48] Erickson, *op. cit.*, p. 32.

[49] *Ibid.*, p. 19.

[50] Popham, *op. cit.*, p. 88.

PRINCIPLE: Before the teacher constructs a performance goal for each competency, he or she plans the evaluation to be used in measuring whether or not a student has achieved a stated competency.[51]

To assure that the criterion stated within the objective will be the one on which evaluation will be made, the measurement of achievement is planned simultaneously with the objective. When the student receives his or her copy of the objective, he or she knows immediately and precisely how he or she will be evaluated.

But, students do not always achieve as expected. Following are some of the situations that a teacher must analyze when the student has not achieved the goals set.

1. *the student does not meet the performance goal on his/her first try.*

The teacher and the student analyze the student's performance. The student's self-evaluations are examined. The student's preparation is analyzed to determine if all the en route goals measured by the interim checkups were met. More instruction and/or more practice is then provided. Following periodic informal evaluations, the student should be able to indicate when he is again ready to try to meet the performance goal.

2. *the student does not meet the performance goal on the next try.*

The teacher should analyze the student's performance, retest the student on selected interim goals, and alter the teaching strategy. The student may need more opportunities for learning and may need different types of learning materials than were used in the first attempts.

3. *the student lacks motivation to achieve the performance goal.*

The goal may not be realistic for the student, or the student may have other problems interfering with performance that should be referred to specialists. The teaching strategy may not stimulate the student, in which case the learning material and/or the strategy may need to be changed.

4. *the student may have achieved at maximum but still have not met the performance goals.*

The student should have the option to terminate typewriting instruction and to decide to pursue a job requiring only incidental typewriting. This student should not be considered a failure. Appropriate credit should be given for achievement shown. For example, the student in first-year typewriting who successfully completes Modules 1 and 2 but fails to complete successfully Modules 3 or 4 or both could be given a half-credit (just as the personal typewriting student is provided a half-credit for completion of Modules 1 and 2A) and should have the option to complete Modules 3 or 4 or both in a later class or by independent study.

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[51] Popham, *op. cit.*, p. 88.

5. *the student and/or the teacher may feel that an interim checkup or competency test met at minimal level is not good enough.*

Even though the student completes an interim checkup or competency test within the time limits and within the error limits, the student and/or the teacher may feel that the student's success was perhaps accidental and that the learning did not take place. The teacher may, in consultation with the student, establish sufficient remedial exercises for the student and set a date for redoing the test.

6. *the student may have learned what was tested in the interim checkups, but may have too many keyboard errors.*

The student who has learned what is tested in the interim tests but who has too many keyboard errors should be directed to Module 1 for further instruction in learning the keyboard.

PRINCIPLE: *Objective measures in grading are based on the difference between the related behaviors a student reveals entering a learning process and those at the end of that process.*[52]

There is much debate among teachers of typewriting as to whether grades should be given for improvement or in terms of how long it takes the learner to complete a unit satisfactorily. Ideally, the school should provide an opportunity for a student to continue working toward his or her objective, either through a special class or through special arrangements, such as independent study, until success is achieved. The student who knows he or she has improved, should expect to be rewarded. On the other hand, the student who completes his/her work rapidly and acceptably should expect to be rewarded also.

The grading scale used during the period can be based upon:

- the number of objectives met at minimum level,
- the number of higher-level objectives achieved,
- the length of time the student required to achieve the objectives, or
- a combination of these.

Postpone giving the slower student a grade until the objectives are met. With flexibility of scheduling, each student should move through the objectives at a comfortable pace.

PRINCIPLE: *The teacher's role (in grading) is to establish as objective a means of measuring student achievement as possible.*[53]

Duplicate grading tables (one for speed, the other for accuracy) for distribution to students at the beginning of the semester. It permits students, immediately upon scoring their work, to assign a grade to their performance;

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[52] Popham, *op. cit.*, p. 157.

[53] *Ibid.*, p. 162.

and it shows at a glance just what performance earns just what grade at any time during the semester.[54]

This revision of *The Typewriting Syllabus* provides students and teachers with assistance in measuring student achievement. The State Advisory Committee, and the writers who followed, have developed specific student performance objectives, which are stated at the beginning of each module. Progressive levels of speed attainment are provided for each module. Interim checkups are strategically placed within the modules to provide checks on student performance in more detail, with greater frequency, and on more skills than covered in the performance objectives. The State Typewriting Competency Tests reflect the content and objectives of the modules contained in this Syllabus.

[54]West, *Acquisition of Typewriting Skills*, pp. 552-555.

Illustrative Proficiency Certificates

PROFICIENCY AWARD

BUSINESS DEPARTMENT

NEW ROCHELLE HIGH SCHOOL

NEW ROCHELLE, NEW YORK

This Proficiency Award Is Presented To:

_____

IN _____

STANDARD OF PERFORMANCE _____

_____

_____

INSTRUCTOR

_____ _____

CHAIRMAN, BUSINESS DEPARTMENT PRINCIPAL

VESTAL CENTRAL SCHOOL

VESTAL, NEW YORK

BUSINESS EDUCATION DEPARTMENT

Certificate of Proficiency

_____

HAVING DEMONSTRATED THE ABILITY TO TYPE ACCURATELY FOR _____ MINUTES AT THE RATE OF _____ WORDS PER MINUTE, IS AWARDED THIS CERTIFICATE OF ATTAINMENT IN RECOGNITION OF PROGRESS.

_____ _____

Date Instructor

TYPEWRITING AWARD

50 WORDS

YORKTOWN HIGH SCHOOL DISTRICT

Yorktown Heights, New York

This is to certify that

Name ..... has been awarded this certificate, having typed an authorized test for five minutes with a speed of ..... words per minute, with a maximum of ..... errors.

It is understood that contestant has complied with the requirements listed on the back of this card.

Bus. Education Department .....

Principal .....

Certified.....

Yorktown Heights Board of Education

Face

I hereby certify that I can

arrange a letter artistically, make reasonable carbon copies, tabulate necessary materials, cut a stencil, run the mimeograph and other duplicating machines, change a typewriter ribbon, clean and oil a typewriter.

Signed .....

Student

Witnessed .....

Yorktown Heights High School

Reverse Side

39

NEW ROCHELLE HIGH SCHOOL

NEW ROCHELLE, NEW YORK

BUSINESS DEPARTMENT

Proficiency Certificate

Front of pocket folder

Proficiency Certificate

BUSINESS DEPARTMENT

NEW ROCHELLE HIGH SCHOOL

NEW ROCHELLE, NEW YORK

_____

Class of 19..... has completed all courses required in the

_____ Curriculum of the Business Department of New Rochelle High School with above average rank among the graduates of this department.

_____

Principal

REPRESENTATIVE GRADES

Social Studies
Bookkeeping Accounting
Business Law
Business Mathematics
Business & Social Adjustment
General Business
Machine Transcription
Office Practice
English IV
Secretarial Practice
Shorthand II
Typewriting

_____

Chairman, Business Department

Inside of pocket folder

CHAPTER VII

THE TYPEWRITING INSTRUCTIONAL LABORATORY

The typewriting room is a basic facility for all business education programs. Ideally, the room should be used for no other purpose than typewriting instruction. In small schools, however, the room will usually have to be designed as a multi-purpose facility. In either case, the choice of equipment and classroom arrangement can have a very beneficial effect upon typewriting instruction. It is the purpose of this chapter, therefore, to give practical suggestions to teachers and administrators for planning the physical aspects of an efficient classroom.

General Considerations

The typical typewriting classroom should be designed to accommodate 30 students. This will necessitate 32 student stations to allow for periodic machine breakdown with minimum loss of student instructional time. In classrooms designed for large group instruction where the concept of a teacher assistant or teacher aide is an established practice, the typewriting classroom *may* be designed to accommodate up to 60 students. Again, consideration should be given to the contingency of machine breakdowns by providing additional student stations beyond the established maximum enrollment.

When planning a typewriting room to be used for instruction in addition to typewriting, the typewriting desk should be of particular concern. The L-shaped desk is well suited to multi-purpose classrooms because it provides space for the typewriter as well as an ample writing area.

An "extra" classroom where typewriters may be used by the faculty as well as students is especially desirable in any large school system. Such a classroom is likely to be in continuous use as a (1) workroom for school publications, (2) independent study facility, or (3) a practice laboratory. In all schools, a typewriting special-purpose facility should be available for student/faculty use beyond the regular scheduled classes.

Classroom Arrangement and Special Features

Size. A typewriting classroom should be sufficiently large that the teacher can move about the room to supervise each student station without disturbing other students at work. A typewriting room should provide a minimum of 25 sq. ft. per pupil station. A combination typewriting-business education classroom, where L-shaped desks are to be used, should provide approximately 30 sq. ft. per pupil station.

Arrangement. "Efficient use" should be the guide for arrangement of the pupil stations and auxiliary equipment. Every effort should be made, therefore, to permit the teacher to monitor each student station with minimum disturbance to other students. Arrangement of equipment with respect to the natural lighting and chalkboard areas should also be a prime consideration. It is important to avoid furniture arrangement that would become barriers to effective group instruction.

Lighting. Typewriting authorities recommend a measurement of 70 to 100 foot-candles of light in a typewriting classroom. Cool white or warm white fluorescent indirect lighting is most satisfactory.

Electric outlets. As offices move almost exclusively to electric typewriters, business education classrooms should reflect this trend. Electric typewriters should be available for instructional use in both beginning and advanced typewriting classes. It is recommended that electric outlets be provided at each pupil station. New building construction should permit each typewriting room to be completely equipped with electric machines.

Noise Control. The typing room should be provided with acoustical ceiling tile or other sound-absorbent material. Industrial carpeting on the floor will give an added dimension to the typewriting room and help to reduce the problem of machine noise.

Storage Space. A variety of storage cabinets, including open-spaced shelving, is considered extremely desirable by modern facilities planners. Most teachers request a 4-drawer filing cabinet, approximately 240 cubic feet of cabinet space, and roughly 120 square feet of open-spaced shelving. It is also desirable that some lockable storage space be provided.

Windows and Doors. The room should be equipped with facilities to control glare and darken the room for a projector. It is recommended that windows be on the northern or eastern side for the best natural lighting. Doors to the corridor at the front and rear are desirable, particularly if the room is designed for large group instruction.

Projection Equipment and Outlets. A 70-inch by 70-inch, or larger, projection screen may be permanently installed or a roll-up type screen provided. Electric outlets should also be located for use of a filmstrip projector, movie projector, overhead projector, and tape recorder.

Chalk Board. The chalkboards should be located for good class visibility. Chalkboard space may be expanded by using a multiple-leafed unit at one or more sides of the room. White or light tan chalkboards make it possible to use the boards in place of a projection screen.

Bulletin Boards. Well lighted bulletin board space is necessary for the posting of student work, charts, display materials, and motivating devices. Bulletin board displays should be changed frequently, and, whenever possible, should be prepared by the students.

Washing Facilities. A sink with soap and towel dispenser is optional but highly desirable, particularly if the classroom is to be used in conjunction with mimeographing activities or as a school workroom as well as an instructional laboratory.

Desks and Chairs. Adjustable or variable height desks, 27 inches to 31 inches high, to accommodate students of various heights, are recommended. L-shaped desks are well suited to combination typewriting-business education classrooms. Secretarial desks should provide for a left-pedestal, 27 inch high shelf for the typewriter.

Adjustable posture chairs, 17 to 20 inches, are desirable. Fixed chairs should be at least 17 inches high.

Utility Work Table and Chairs. A work table will provide the space necessary for stapling, collating, paper cutting, and other activities that are commonly part of the assembling-collecting processes. The work table should also be positioned so as not to interfere with the line-of-sight to the front of the room.

Typewriters and Related Materials

Make. Many teachers prefer to have typewriters of one make. This will simplify the instructional process and may facilitate repairs. If the room is also used for secretarial, clerical, or office practice, students should have the opportunity to use the most common makes of typewriters.

Keyboard. Practically all teachers today indicate a preference for visible keyboards, and research supports this practice.

Type Size. Since most business offices use elite type, it is desirable that a majority of the typewriters be of this type face. A few of the machines, however, should be of the pica type face.

Manual and Electric. Even in beginning classes, students should have the opportunity to gain some familiarity with the electric typewriter. The tendency is toward the use of only electric machines in modern business offices.

Covers. Typewriters should be covered when not in use. A systematic method of handling covers should be devised along with classroom instruction dealing with typewriter care. Supplies for cleaning the machines should be available and used periodically to help students become aware of measures that can be taken to extend the life of a typewriter and to insure top quality typewriter copy,

Ribbons. A supply of typewriter ribbons should be kept on hand. Each student should be required to have more than one experience in changing a ribbon.

Typewriter Record. A location and seating plan should be maintained showing each typewriter by make and serial number. It is also desirable to keep a card file showing pertinent data for each machine such as make, serial number, date of purchase, cost, repairs, etc. Location of each machine is desirable if the card file is departmental, thus accounting for machines in more than one room.

Suggested Teacher Aids and Equipment

The following items are considered essential to a good typewriting instructional program:

- Demonstration stand with typewriter
- Desk trays (for teacher desk)
- Wall and individual keyboard charts
- Progress and motivating charts
- Posture and technique posters
- Model letters

Films and Filmstrips
Movie projector
Filmstrip projector
Overhead projector
Tape recorder

Paper cutter
Stapling machine
Wastepaper baskets
Three-hole punch

Suggested Pupil Aids and Equipment

Textbooks. A typewriting textbook should be provided for each student. It is desirable that one or more sets of supplementary textbooks be available. When new texts are purchased, the old set may be retained for this purpose. Care should be exercised to secure textbooks that are especially designed for the particular age level of students involved. For example, an eighth grade typewriting class should be provided with a text with a reading level and style of presentation suited to students of that general age.

Copyholder. Each student desk should have a copyholder. Care should be taken to select a copyholder that will properly support the textbook being used.

Dictionaries. An abridged dictionary should be provided each student station; and an unabridged dictionary should be available for general class use.

Technique Analysis Chart. Regular use of an individual technique analysis chart will focus the attention of each student on his own specific weaknesses.

Keyboard Chart. Each student desk should be provided with a small keyboard chart.

Self-Instructional and Remedial Equipment

Instructional tapes are now available from commercial producers that are suited to various aspects of a typewriting instructional program. Such tapes can, for example, be used effectively to reinforce instruction presented by the teacher or to provide initial or remedial instruction for students who are absent or who need additional help.

A self-learning or resource center is recommended in large high schools where students may learn typewriting or other knowledges and skills through the use of multi-media instructional materials. Self-instructional typewriting tapes and visual presentations are well suited to this purpose. Ideally such a learning center should have a teacher available to assist with the use of the various learning materials and to make suggestions for practice and remedial work.

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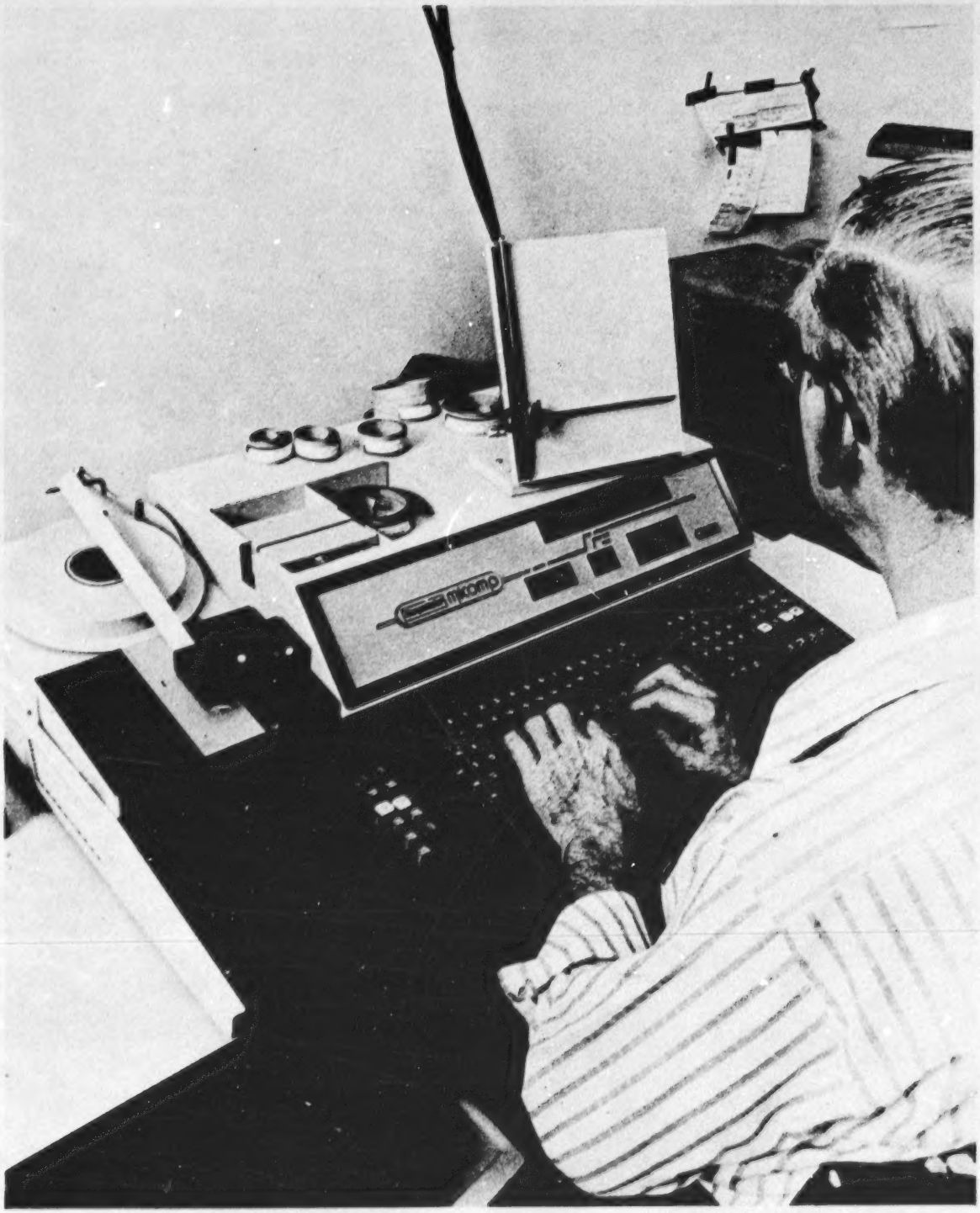

Expert typists are needed to operate key-to-tape microcomputers in printing plants.